RECENT ADVANCES AND APPLICATIONS OF BEAM-BEAM SIMULATION CODES

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In this paper, we report on recent advances in beam-beam simulation codes and their applications to both hadron and lepton colliders. The numerical methods used in the codes will be surveyed and discussed. Strong-strong simulations of coherent beam-beam modes with multiple bunches per beam and multiple collision points at RHIC will be presented. The effects of crossing collision angle on luminosity at KEKB will also be presented.

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